UNITED STATES PATENT AND TRADEMARK OFFICE

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| 09/868,664 | 09/26/2001 | Stewart Mark Nichols | 05222.00161 | 3001 |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) |
|---|---|---|---|
| **Office Action Summary** | | 09/868,664 | NICHOLS, STEWART MARK |
| | | Examiner | Art Unit | |
| | | PETER COUGHLAN | 2129 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>30 January 2008</u>.

2a)☒ This action is **FINAL**.        2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>20 June 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

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U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)                    **Office Action Summary**                    Part of Paper No./Mail Date 04142008

## Detailed Action

1.      This office action is in response to an AMENDMENT entered January 30, 2008

for the patent application 09/868664 filed on June 20, 2001.


2.      All previous office actions are fully incorporated into this Final Office Action by

reference.


### *Status of Claims*

3.      Claims 1-21 are pending.


### *Claim Rejections - 35 USC § 112*


4.      The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the
> manner and process of making and using it, in such full, clear, concise, and exact
> terms as to enable any person skilled in the art to which it pertains, or with which
> it is most nearly connected, to make and use the same and shall set forth the
> best mode contemplated by the inventor of carrying out his invention.

> Claims 1, 10 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing

to comply with the written description requirement.  The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims state the ability that providing feedback will result in motivation to accomplish a goal. There is no documentation that providing feedback to a student which is based on at least one profile will further motivates accomplishment of a goal. The specification lacks any specific information which guarantees 'motivation' based on 'feedback.'

These claims must be amended or withdrawn from consideration.


Claims 7, 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims use the term 'capturing portions' which is not clear in response to the specification. Is this outputting the results in response to a user's input? The Examiner does not want to make assumptions on what is meant by 'capturing portions' but feels this is easily remedied by amending the claims to fit language used within the specification.

These claims must be amended or withdrawn from consideration.


***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form
the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a
foreign country or in public use or on sale in this country, more than one year
prior to the date of application for patent in the United States.

Claims 1-3, 5, 7, 10-12, 14, 16, 19-21 are rejected under 35 U.S.C. 102(b)

(hereinafter referred to as **Chiang**) being anticipated by Chiang et al., U.S. 5535422.

Claim 1

Chiang anticipates matching a profile against a simulation domain, wherein the

profile comprises a set of criteria and identifies a desired aspect for a current simulation

task (**Chiang,** C5:8-35; 'Profile' of applicant is equivalent to 'tutorial system' of Chiang.

'Simulation domain' of applicant is equivalent to 'product' of Chiang.  Therefore 'simulation

task' of applicant is the current 'product' which is being taught by the tutorial system.);

presenting information indicative of a goal (**Chiang,** C9:24 through C10:41; 'Presenting

information indicative of a goal' of applicant is equivalent to a 'lesson' of Chiang.):

integrating information that motivates accomplishment of the goal (**Chiang,** C9:24

through C10:41; The integration of information of applicant is disclosed by the 'overview

of a first lesson' of Chiang.); monitoring progress toward the goal determining at least

one profile that is true, for the current simulation task from a set of profiles, and

providing feedback to a student, based on the at least one profile, that further motivates

accomplishment of the goal (**Chiang,** C3:9-19; 'Monitoring' of applicant is equivalent to

'monitor' of Chiang. 'Providing feedback' of applicant is equivalent to 'provide input assistance' of Chiang.) the at least one profile conjunctively, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (**Chiang,** C9:24 through C10:41; 'Plurality of characteristics' of applicant is equivalent to 'steps' of Chiang. 'Each characteristic identifying a subset' of applicant is equivalent to ''steps are like subtasks' of Chiang. Therefore a single characteristic of applicant is equivalent to 'subtask' of Chiang.) and; and displaying details of the computer-implemented method and displaying the tutorial presentation as the tutorial presentation executes, wherein the tutorial presentation provides a cognitive educational experience. (**Chiang,** C9:24 through C10:41; 'Displaying details' of applicant is accomplished by the 'tutorial window' and the 'product window' of Chiang.)

Claims 2, 11.

Chiang anticipates instantiating a particular feedback model based on characteristics of the student. (**Chiang,** C3:20-44; 'Instantiating a particular feedback' of applicant is illustrated by 'each panel sequentially lists and describes one or more user input actions' of Chiang.)

Claims 3, 12.

Chiang anticipates receiving and analyzing user responses using rule based expert training system to determine details of the computer-implemented method to

display. (**Chiang,** C7:17-39; 'Expert system' of applicant is equivalent to 'expert system'
of Chiang.)


      Claims 5, 14.

      Chiang anticipates displaying source code of the tutorial presentation as the tutorial
presentation executes. (**Chiang,** C9:24 through C10:41; 'Displaying source code' of applicant
is the output which is displayed on both the 'tutorial window' and the 'product window' of
Chiang.)


      Claims 7, 16.

      Chiang anticipates capturing portions of the tutorial presentation in response to a user
input as the tutorial presentation executes. (**Chiang,** abstract; 'Capturing portions' of applicant
is equivalent to 'input system' of Chiang.)


      Claim 10

      Chiang anticipates a processor that runs a computer program to create the tutorial
presentation, the computer program comprising of logic (**Chiang,** abstract; 'Processor' of
applicant is equivalent to 'CPU' of Chiang.); a memory that stores information under control of
the processor(**Chiang,** abstract; 'Memory' of applicant is equivalent to 'data storage device'
of Chiang.) matching a profile against a simulation domain, wherein the profile
comprises a set of criteria and identifies a desired aspect for a current simulation task
(**Chiang,** C5:8-35, C7:17-39, C9:24 through C10:41; 'Profile' of applicant is equivalent to

and

'tutorial system' of Chiang. 'Simulation domain' of applicant is equivalent to 'product' of

Chiang.  Therefore 'simulation task' of applicant is the current 'product' which is being taught

by the tutorial system. 'Set of criteria' of applicant is equivalent to 'tutorial window' and

'product window' of Chiang.); presenting information indicative of a goal (**Chiang,** C9:24

through C10:41; 'Presenting information indicative of a goal' of applicant is equivalent to

a 'lesson' of Chiang.): integrating information that motivates accomplishment of the goal

(**Chiang,** C9:24 through C10:41; The integration of information of applicant is disclosed

by the 'overview of a first lesson' of Chiang.); monitoring progress toward the goal

determining at least one profile that is true, for the current simulation task from a set of

profiles, and providing feedback to a student, based on the at least one profile, that

further motivates accomplishment of the goal (**Chiang,** C3:9-19; 'Monitoring' of

applicant is equivalent to 'monitor' of Chiang. 'Providing feedback' of applicant is

equivalent to 'provide input assistance' of Chiang.), the at least one profile conjunctively

using a plurality of characteristics, each characteristic identifying a subset of the

simulation domain (**Chiang,** C9:24 through C10:41; 'Plurality of characteristics' of applicant

is equivalent to 'steps' of Chiang. 'Each characteristic identifying a subset' of applicant is

equivalent to ''steps are like subtasks' of Chiang. Therefore a single characteristic of

applicant is equivalent to 'subtask' of Chiang.); and; and displaying details of the computer-

implemented method and displaying the tutorial presentation as the tutorial presentation

executes, wherein the tutorial presentation provides a cognitive educational experience.

(**Chiang,** C9:24 through C10:41; 'Displaying details' of applicant is accomplished by the

'tutorial window' and the 'product window' of Chiang.)

Claim 19

Chiang anticipates matching a profile against a simulation domain, wherein the

profile comprises a set of criteria and identifies a desired aspect for a current simulation

task (**Chiang,** C5:8-35, C7:17-39, C9:24 through C10:41; 'Profile' of applicant is equivalent to

'tutorial system' of Chiang. 'Simulation domain' of applicant is equivalent to 'product' of

Chiang. Therefore 'simulation task' of applicant is the current 'product' which is being taught

by the tutorial system. 'Set of criteria' of applicant is equivalent to 'tutorial window' and

'product window' of Chiang.); presenting information indicative of a goal (**Chiang,** C9:24

through C10:41; 'Presenting information indicative of a goal' of applicant is equivalent to

a 'lesson' of Chiang.): integrating information that motivates accomplishment of the goal

(**Chiang,** C9:24 through C10:41; The integration of information of applicant is disclosed

by the 'overview of a first lesson' of Chiang.); monitoring progress toward the goal

determining at least one profile that is true, for the current simulation task from a set of

profiles, and providing feedback to a student, based on the at least one profile, that

further motivates accomplishment of the goal (**Chiang,** C3:9-19; 'Monitoring' of

applicant is equivalent to 'monitor' of Chiang. 'Providing feedback' of applicant is

equivalent to 'provide input assistance' of Chiang.), the at least one profile conjunctively

using a plurality of characteristics, each characteristic identifying a subset of the

simulation domain (**Chiang,** C9:24 through C10:41; 'Plurality of characteristics' of applicant

is equivalent to 'steps' of Chiang. 'Each characteristic identifying a subset' of applicant is

equivalent to ''steps are like subtasks' of Chiang. Therefore a single characteristic of

applicant is equivalent to 'subtask' of Chiang.); and; and displaying details of the computer-implemented method and displaying the tutorial presentation as the tutorial presentation executes, wherein the tutorial presentation provides a cognitive educational experience. (**Chiang,** C9:24 through C10:41; 'Displaying details' of applicant is accomplished by the 'tutorial window' and the 'product window' of Chiang.)

Claim 20.

Chiang anticipates (d) (i) identifying a subset of the simulation domain from at least one characteristic of the profile; and (**Chiang,** C9:24 through C10:41; 'Plurality of characteristics' of applicant is equivalent to 'steps' of Chiang. 'Each characteristic identifying a subset' of applicant is equivalent to ''steps are like subtasks' of Chiang. Therefore 'subset' of applicant is equivalent to 'subtasks' of Chiang. Therefore a single characteristic of applicant is equivalent to 'subtask' of Chiang.) (d)(ii) determining the feedback in accordance with the subset of the simulation domain. (**Chiang,** C3:9-19; 'Determining the feedback' of applicant is equivalent to 'provide input assistance' of Chiang.)

Claim 21

Creating another profile that reuses at least one of the pluralities of characteristics (**Chiang,** C3:66 through C4:10; 'Creating another profile that reuses at least one of the pluralities of characteristics' of applicant is illustrated by the 'lesson control file is structured hierarchically.' If a student wants (creates) another profile that is higher in the hierarchically structure, all of the smaller characteristics would be

incorporated into that profile; and providing subsequent feedback to the student, based

on the other profile. (**Chiang,** C3:9-19; 'Providing subsequent feedback' of applicant is

equivalent to 'provide input assistance' of Chiang.)

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

Claims 4, 6, 8, 9, 13, 15, 17, 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chiang as set forth above, in view of Goleh. (U. S. Patent 5372507,

referred to as **Goleh**)

Claims 4, 13.

Chiang does not teach browsing details of an object as the tutorial presentation

executes.

Goleh teaches browsing details of an object as the tutorial presentation

executes. (**Goleh,** C3:24-45; 'Browsing details' of applicant is equivalent to 'menu

based system' of Goleh.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Chiang by presenting an outline of the tutorial as taught by Goleh to have browsing details of an object as the tutorial presentation executes.

For the purpose of disclosing to the user an outline of the lesson to aid in understanding the concept of the lesson.


Claims 6, 15.

Chiang does not teach modifying the tutorial presentation based on a user input as the tutorial presentation executes.

Goleh teaches modifying the tutorial presentation based on a user input as the tutorial presentation executes. (**Goleh,** C3:24-45; 'Modifying the tutorial presentation' of applicant is equivalent to 'As the student progresses through the tutorial, information that is necessary to the student's successful completion of the task at hand may be presented in the appropriate context most conductive to the student's best learning of the immediate subject' of Goleh. By being able to evaluate the task at hand, and providing information at hand indicates the ability to modify the tutorial presentation.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Chiang by disclosing lessons which are indicated as taught by Goleh to have the tutorial presentation based on a user input as the tutorial presentation executes.

For the purpose of limiting the tutorial only to the topic thus having increased efficiency.

Claims 8, 17.

Chiang does not teach tailoring feedback based on a user input Is the tutorial presentation executes.

Goleh teaches tailoring feedback based on a user input Is the tutorial presentation executes. (**Goleh,** C3:24-45, C5:31-54; Goleh discloses the ability to anticipate. Goleh discloses responses to input and evaluation. 'Tailoring feedback' of applicant is disclosed by 'Upon detection, the student is informed of the error through the monitor and appropriate help is given by the tutorial to the student.' Therefore, 'feedback' of applicant is equivalent to 'help of Goleh.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Chiang by providing feedback to only what is taught as taught by Goleh to have tailored feedback based on a user input Is the tutorial presentation executes.

For the purpose of limiting the feedback only to the topic thus having increased efficiency.

Claims 9, 18.

Chiang does not teach presenting a tailored simulation based on user input as the tutorial presentation executes.

Goleh teaches presenting a tailored simulation based on user input as the tutorial presentation executes. (**Goleh,** C5:15-30; 'Presenting a tailored simulation' of applicant is illustrated by 'possible menu selections may be presented to the student through the monitor to which the student may respond by supplying input through the keyboard to interactively control the operation of the tutorial' of Goleh.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Chiang by displaying only what is requested as taught by Goleh to presenting a tailored simulation based on user input as the tutorial presentation executes.

For the purpose of limiting the presentation only to the topic thus having increased efficiency.

### *Response to Arguments*

5.      Applicant's arguments filed on January 30, 2008 for claims 1-21 have been fully considered but are not persuasive.

6.      In reference to the Applicant's argument:

Objections

The specification is objected to based on the alleged statement that the preferred embodiment is written using JAVA, C, and C++ languages and utilizes object oriented programming methodology.

The Office Action alleges that (Page 3, section 4): The specification is silent regarding how to incorporate a non-object oriented language such as 'C' as a object oriented language such as 'C++' or 'JAVA.' In order to expedite prosecution of the present patent application, Applicant is deleting reference to the C programming language. Applicant requests withdrawal of the objections to the specification.

Examiner's response:

The Examiner notes the correction within the specification which eliminates the

computer language 'C' as an object oriented language.

7.      In reference to the Applicant's argument:

Claim Rejections -35 U.S.C. §112

Claims 1, 10, and 19 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.

Regarding claims 1, 10, and 19, the Office Action alleges that (Page 3, section 5): These claims state the ability that providing feedback will result in motivation to accomplish a goal. There is no documentation that providing feedback to a student which is based on at least one profile will further motivates accomplishment of a goal. The specification lacks any specific information which guarantees 'motivation' based on 'feedback.'

Applicant respectfully disagrees. Regarding claim 1, the claim includes the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." For example, the specification discloses (Page 3, line 25- page 4, line 4.):

Figure 2 is a block diagram of a system architecture in accordance with a preferred embodiment. The Presentation 'layer' 210 is separate from the activity 'layer' 220 and communication is facilitated through a set of messages 230 that control the display specific content topics. A preferred embodiment enables knowledge workers 200 & 201 to acquire complex skills rapidly, reliably and consistently across an organization to deliver rapid acquisition of complex skills. This result is achieved by placing individuals in a simulated business environment that "looks and feels" like real work, and challenging them to make decisions which support a business' strategic objectives utilizing highly effective learning theory (e.g., goal based learning, learn by doing, failure based learning, etc.), and the latest in multimedia user interfaces, coupled with three powerful, integrated software components. The first of these components is a software Solution Construction Aid (SCA) 230 consisting of a mathematical modeling tool 234 which simulates business outcomes of an individual's collective actions over a period of time. The second component is a knowledge system 250 consisting of an HTML content layer which organizes and presents packaged knowledge much like an online text book with practice exercises, video war stories, and a glossary. The third component is a software tutor 270 comprising an artificial intelligence engine 240 which generates individualized coaching messages based on decisions made by learner.

Feedback is unique for each individual completing the course and supports client cultural messages 242 "designed into" the course. A business simulation methodology that includes support for content acquisition, story line design, interaction design, feedback and coaching delivery, and content delivery is architected into the system in accordance with a preferred embodiment. A large number of "pre-designed" learning interactions such as drag and drop association of information 238, situation assessment/action planning, interviewing (one-on- one, one-to-many), presenting (to a group of experts/executives), metering of performance (handle now, handle later), "time jumping" for impact of decisions, competitive landscape shift (while "time jumping", competitors merge, customers are acquired, etc.) and video interviewing with automated note taking are also included in accordance with a preferred embodiment. The system shown in Figure 2, which includes feedback 242, enables "knowledge workers 200 & 201 to acquire complex skills rapidly, reliably and consistently across an organization to deliver rapid acquisition of complex skills" and thus motivates the student to accomplish a goal associated with acquiring complex skills. I The specification further discloses (Page 9, line 32- page 10, line 6.):

In the simplest terms, the purpose of the Profiling Component is to analyze the current state of a domain and identify specific things that are true about that domain. This information is then passed to the Remediation Component which provides feedback to the student. The Profiling Component analyzes the domain by asking questions about the domain's state, akin to an investigator asking questions about a case. The questions that the Profiler asks are called profiles. For example, suppose there is a task about building a campfire and the student has just thrown a match on a pile of wood, but the

fire didn't start. In order to give useful feedback to the student, a tutor would need to know things like: was the match lit?, was the wood wet?, was there kindling in the pile?, etc. These questions would be among the profiles that the Profiling Component would use to analyze the domain. The results of the analysis would then be passed off to the Remediation Component which would use this information to provide specific feedback to the student. Specifically, a profile is a set of criteria that is matched against the domain. The purpose of a profile is to check whether the criteria defined by the profile is met in the domain. Using a visual editing tool, instructional designers create profiles to identify those things that are important to know about the domain for a given task. During execution of a BusSim application at the point that feedback is requested either by the student or pro-actively by the application, the set of profiles associated with the current task are evaluated to determine which ones are true. Example profiles include: Good productions strategy but wrong Break-Even Formula; Good driving record and low claims history; and Correct Cash Flow Analysis but poor Return on Investment (ROI).

A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Perfect cost classification; At Least 1 DUI in the last 3 years; More than $4000 in claims in the last 2 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= I ; ROI > 10%; and Income between $75,000 and $110,000. A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands. Collective characteristics allow instructional designers to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating: Problems with Cash for Expense transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse these elements within multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile from its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As disclosed above, feedback may be based on a profile. For at least the above reasons, Applicant believes that the specification satisfies the written description requirement under 35 U.S.C 112, first paragraph. Claim 10 includes the similar feature of"logic that monitors progress toward the goal, determines at least one profile that is true for the current simulation task from a set of profiles, and provides feedback to a student, based on the at least one profile, that further motivates accomplishment of the

goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." Similarly, claim 19 includes the feature of "monitoring progress toward the goal, determining at least one profile from that is true for the current simulation task a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." Thus, Applicant requests reconsideration of claims 1, 10, and 19.

Examiner's response:

'Motivation' is an intangible quality and per the independent claims, the invention provides 'motivation by supplying feedback. This argument has no factual support. If the invention cuts off the user's air supply if a wrong answer is given, and the invention supplies feedback for the user to find the correct answer and thus resulting in returning the user's air supply, this might be considered providing the user with motivation. The specification provides no such motivation as stated above or similar 'motivation' parameters. Just because the invention provides 'feedback' does not imply that the user will be 'challenging them to make decisions which support a business' strategic objective.' There is no logic with the applicant's argument. Office Action stands.

8.      In reference to the Applicant's argument:

Claims 2 and 11 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.

Regarding claims 2 and 11, the Office Action alleges that (Page 4.):
These claims use the term 'target user' which is not used within the specification. The Examiner does not want to make assumptions on what is meant by 'target user' but

feels this is easily remedied by amending the claims to fit language used within the specification.

Applicant is amending claims 2 and 11 to replace "a target user" with "the student." The amendment is supported by the specification as originally filed. For example, the specification discloses (Page 14, line 19- page 15, line 10.):

In the ICAT model of feedback, there are four levels of severity of error and four corresponding levels of feedback. The tutor goes through the student's work, identifies the severity of the error and then provides the corresponding level of feedback.

Returning to the analogy of helping someone write a paper, if the student returns with the paper rewritten, but with many errors in one area of the paper, focus feedback is needed. With all of those errors fixed and only spelling mistakes-- syntactic mistakes-- polish feedback is needed. When all syntactic mistakes were corrected, the tutor would return praise and restate why the student had written the correct paper. Focusing on the educational components of completing a task is not enough. As any teacher knows, student will often try and cheat their way through a task. Students may do no work and hope the teacher does not notice or the student may only do minor changes in hope of a hint or part of the answer. To accommodate these administrative functions, there are three additional administrative categories of feedback. The administrative and the educational categories of feedback account for every piece of feedback a designer can write and a student can receive. To provide a better understanding of how the feedback works together, an example is provided below.


Examiner's response:

    The Examiner notes the amended claims and withdraws the rejection.




9.    In reference to the Applicant's argument:

    Applicant requests reconsideration of claims 2 and 11.

Claims 3 and 12 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.

Referring to claims 3 and 12, the Office Action alleges that (Page 4.):

These claims state using a 'expert system' but fail to mention what type of expert system is to be employed. There are numerous designs and algorithms are considered 'expert systems' such as neural networks or fuzzy logic. The specification is silent when describing what type of 'expert system' is to be employed thus allowing the applicant to consider anything to be classified as a 'expert system.'

Applicant is amending claim 3 to include the feature "including receiving and analyzing user responses using rule based expert training system to determine details of the computer- implemented method to display" in order to clarify the claimed invention. The amendment is supported by the specification as originally filed, e.g., page 1, lines 30-39, page 10, lines 29-40, and page 21, lines 1-15. The specification discloses (Page 1, lines 30-39.):

According to a broad aspect of a preferred embodiment of the invention, a goal based learning system utilizes a rule based expert training system to provide a cognitive educational experience. The system provides the user with a simulated environment that presents a business opportunity to understand and solve optimally. Mistakes are noted and remedial educational material presented dynamically to build the necessary skills that a user requires for success in the business endeavor. The system utilizes an artificial intelligence engine driving individualized and dynamic feedback with synchronized video and graphics used to simulate real-world environment and interactions. Multiple "correct" answers are integrated into the learning system to allow individualized learning experiences in which navigation through the system is at a pace controlled by the learner. A robust business model provides support for realistic activities and allows a user to experience real world consequences for their actions and decisions and entails realtime decision-making and synthesis of the educational material. The system includes tools for analysis and display of a presentation as it is presented.

Applicant is similarly amending claim 12 to include the feature of "including logic that receives and analyzes user responses using a rule based expert training system to determine details of the computer program to display." Applicant believes that claims 3 and 12 are in compliance with 35 U.S.C. 112, first paragraph, and requests reconsideration of claims 3 and 12.

Claims 4 and 13 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.


Examiner's response:

        The Examiner notes the amended claims and withdraws the rejection.

10.    In reference to the Applicant's argument:

Referring to claims 4 and 13, the Office Action alleges that (Page 5.):

These claims use terms such as 'browsing details' or 'browses details'. These terms are
not used within the specification. The Examiner does not want to make assumptions on
what is meant by 'browsing details' or 'browses details.'

Applicant respectfully disagrees. Regarding claim 4, the claim includes the feature
of"including browsing details of an object as the tutorial presentation executes." For
example, in reference to Figure 16, the specification discloses (Page 17, lines 13-32.):

The Test Scenario demonstrates the cycle that the team goes through to test the
application. It specifically addresses usability testing, but it is easy to see how the tools
also benefit functional and cognition testing. Again, we will use the Journalization Task
as an example. Figure 16 illustrates a test scenario in accordance with a preferred
embodiment. The test students work through the journalization activity. One of the
students has made it over half way through the task and has just attempted to journalize
the sixteenth transaction. The student submits to the Financial Coach, but the feedback
comes back blank. The student notifies the facilitator who right-clicks on the Financial
Coach's face in the feedback window. A dialog pops up that shows this is the twenty-
seventh submission and shows some other details about the submission. The facilitator
(or even the student in recent efforts) enters a text description of the problem, and fills
out some other fields to indicate the nature and severity of the problem. All the student's
work and the feedback they got for the twenty-seven submissions is posted to the User
Acceptance Test (UAT) archive database. The instructional designer can review all the
student histories in the UAT database and retrieve the session where the student in
question attempted the Journalization Task. The designer then recreates the problem
by replaying the student's twenty-seven submissions through the component engines
using the Regression Test Workbench. The designer can then browse through each
submission that the student made and view the work that the student did on the
submission, the feedback the student got, and the facilitator comments, if any. Now the
designer can use the debugging tools to determine the source of the problem. In a few
minutes, she is able to determine that additional profiles and topics are needed to
address the specific combinations of mistakes the student made. She uses the
Knowledge Workbench to design the new profiles and topics. She also adds a

placeholder and a script for a video war story that supports the learning under these circumstances. The designer saves the new design of the task and reruns the Regression Test Workbench on the student's session with the new task design. After she is satisfied that the new profiles, topics, and war stories are giving the desired coverage, she ships the new task design file to user testing and it's rolled out to all of the users.

As disclosed above, a designer can browse through a submission that is submitted by a student during a presentation2. Also, claim 13 includes the similar feature of "including logic that browses details of an object as the tutorial presentation executes." Applicant requests reconsideration of claims 4 and 13.

Examiner's response:

    Based on the applicant's response, the Examiner with view 'browsing details' or

'browses details' equivalent to 'reviewed details.'  The rejection is withdrawn.

11.    In reference to the Applicant's argument:

Claims 5 and 14 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.

The Office Action alleges that (Page 5.):

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims use the term 'source code' which is not mentioned within the specification. Is 'source code' equivalent to 'JAVA' or 'C++' or the machine language which results from the compiling of 'JAVA' or 'C++ ?'

Claims 5 and 14 contain features of "displaying source code of the tutorial presentation as the tutorial presentation executes" and "logic that displays source code of the tutorial presentation as the tutorial presentation executes", respectively. The specification discloses embodiments that utilize different programming languages. For example, the specification (as amended as discussed above) discloses that (Page 3, lines 15-23.):

A preferred embodiment is written using JAVA and the C++ language and utilizes object oriented programming methodology. Object oriented programming (OOP) has become increasingly used to develop complex applications. As OOP moves toward the mainstream of software design and development, various software solutions require adaptation to make use of the benefits of OOP. A need exists for these principles of OOP to be applied to a messaging interface of an electronic messaging system such that a set of OOP classes and objects for the messaging interface can be provided. A simulation engine in accordance with a preferred embodiment is based on a Microsoft Visual Basic component developed to help design and test feedback in relation to a Microsoft Excel spreadsheet. These spreadsheet models are what simulate actual business functions and become a task that will be performed by a student The Simulation Engine accepts simulation inputs and calculates various outputs and notifies the system of the status of the simulation at a given time in order to obtain appropriate feedback.

JAVA and C++ languages are examples of computer languages in which source code is written for creating a tutorial presentation. In other words, the source code corresponds to the lines of code written in a computer language such as JAVA or C++.

For at least the above reasons, the subject matter in claims 5 and 14 is described in the specification in a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. Applicant requests reconsideration of claims 5 and 14.


Examiner's response:

       The Examiner withdraws the rejection based on the applicant's arguments. The

examiner wanted to make sure that the applicant wanted to display the presentation(s),

claims 1 and 10, and the source behind the presentations, claims 5 and 15. In this

explanation, the applicant wants the source code which dictates the 'blue background'

while using the font 'Arial' for the presentation to be displayed.

12.    In reference to the Applicant's argument:

Claims 6 and 15 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing
to comply with the written description requirement.

The Office Action alleges that (Page 6.):

These claims state that 'modifying the tutorial presentation based on a user input as the
tutorial presentation executes' which is not stated within the specification. The Examiner
does not want to make assumptions on what is meant by 'modifying the tutorial
presentation based on a user input as the tutorial presentation executes' but feels this is
easily remedied by amending the claims to fit language used within the specification.

Regarding claim 6, Applicant is amending the claim to include the feature of "including
modifying the tutorial presentation based on a user input as the tutorial presentation
executes." The amendment is supported by the specification as originally filed, e.g.,
page 15, line 11 - page 16, line 12. In reference to Figures 8, 9, 12, and 13, the display
to the user is changed during the presentation based on student input (e.g., dragging an
account, entering a dollar amount, and clicking on a displayed button). Also, Applicant is
similarly amending claim 15 to include the feature of "including logic that modifies the
tutorial presentation based on user input as the tutorial presentation executes."
Applicant requests reconsideration of claims 6 and 15.

Examiner's response:

        Based on the applicant's arguments, the Examiner withdraws the rejection.

13.    In reference to the Applicant's argument:

Claims 7 and 16 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing
to comply with the written description requirement.

The Office Action alleges that (Page 7.):

These claims use the term 'capturing portions' which is not clear in response to the
specification. Is this outputting the results in response to a user's input? The Examiner
does not want to make assumptions on what is meant by 'capturing portions' but feels

this is easily remedied by amending the claims to fit language used within the specification.

Regarding claim 7, Applicant is amending the claim to include the feature of "including capturing portions of the tutorial presentation in response to user input as the tutorial presentation executes." The amendment is supported by the specification as originally filed. For example, the specification discloses (Page 15, line 11 - page 16, line 12.):

Figure 8 is a GBS display in accordance with a preferred embodiment. The upper fight area of the screen shows the account list. There are four types of accounts: Assets, Liabilities & Equity, Revenues, and Expenses. The user clicks on one of the tabs to show the accounts of the corresponding type. The student journalizes a transaction by dragging an account from the account list onto the journal entry Debits or Credits. The student then enters the dollar amounts to debit or credit each account in the entry. In the interface, as in real life, the student can have multi-legged journal entries (i.e., debiting or crediting multiple accounts).A Toolbar 1200 and the first transaction of this Task 1210 appear prominently on the display. The student can move forward and back through the stack of transactions. For each transaction, the student must identify which accounts to debit and which to credit. When the student is done, he clicks the Team button. Figure 9 is a feedback display in accordance with a preferred embodiment. The student may attempt to outsmart the system by submitting without doing anything. The ICAT system identifies that the student has not done a substantial amount of work and returns the administrative feedback depicted in Figure 9. The feedback points out that nothing has been done, but it also states that if the student does some work, the tutor will focus on the first few journal entries. Figure 10 illustrates a journal entry simulation in accordance with a preferred embodiment. Figure 11 illustrates a simulated Bell Phone Bill journal entry in accordance with a preferred embodiment. The journal entry is accomplished by debiting Utilities Expenses and Crediting Cash for $700 each. Figure 12 illustrates a feedback display in accordance with a preferred embodiment. After attempting to journalize the first three transactions, the student submits his work and receives the feedback depicted in Figure 12. The feedback starts by focusing the student on tile area of work being evaluated. The ICAT states that it is only looking at the first three journal entries. The feedback states that the first two entries are completely wrong, but the third is close. If the student had made large mistakes on each of the first three transactions, then the ICAT may have given redirect feedback, thinking a global error occurred. The third bullet point also highlights how specific the feedback can become, identifying near misses.

As disclosed above, the ICAT system looks at the first three journal entries that are entered by the student during the presentation. Applicant believes that claim 7 complies with the written requirement of 35 U.S.C. 112, first paragraph, for the reasons discussed above. Also, claim 16 includes the similar feature of "including logic that captures portions of the tutorial presentation in response to user input as the tutorial presentation executes." Applicant requests reconsideration of claims 7 and 16.

Examiner's response:

There is still no explanation of what is meant by 'capturing portions.' Office

Action stands.

14.    In reference to the Applicant's argument:

Claims 8, 9, 17, and 18 are rejected under 35 U.S.C. 112, first paragraph, as allegedly
failing to comply with the written description requirement.

The Office Action alleges that (Pages 7-8.):

These claims seem the same as claims 5 and 14. Since there are different claims some
which state 'modifying the tutorial presentation based on a user input as the tutorial
presentation executes' and 'tailoring feedback based on a user input as the tutorial
presentation executes' and others which state 'presenting a tailored simulation based on
user input as the tutorial presentation executes.' The Examiner does not know what is
the difference between the three statements due to fact the specification does not
clearly use these terms. The Examiner does not want to make assumptions on what is
meant by 'modifying the tutorial presentation based on a user input as the tutorial
presentation executes' and 'tailoring feedback based on a user input as the tutorial
presentation executes' and 'presenting a tailored simulation based on user input as the
tutorial presentation executes' but feels this is easily remedied by amending the claims
to fit language used within the specification.

Applicant respectfully disagrees. (Applicant believes that the above allegation is in
relation to claims 6 and 15 and not claims 5 and 14.) Regarding claim 8, the claim
includes the feature of "including tailoring feedback based on user input as the tutorial
presentation executes." Also, claim 9 includes the feature of "including presenting a
tailored simulation based on user input as the tutorial presentation executes." The
specification as originally filed provides support for these features. For example, the
specification discloses (Page 4, line 39 - page 5, line 15.):

The key to such a support system is that it is seamlessly integrated into the business
system that the knowledge worker uses to execute their job tasks. Workers don't need

to go "off-line" or seek out cryptic information buried within paper manuals and binders for guidance or to find the answer to queries. All the support components are made available through the same applications the worker's use, at the point in which they need them, tailored to the individual to show "how", not just "what". Learning would be occurring all the time, with little distinction between performing and improving performance. Establishing that training should focus on performance (how), rather than facts (what), and extending the model of learning to include assistance while performing, rather than only before performance, still leaves us dangerously exposed in preparing to compete in the new, chaotic economy. As was mentioned in the opening of this paper, the pace of change in business today is whiplash fast. Not only are new methods of doing business evolving every 18-24 months, new competitors emerge, dominate, and fade in time periods businesses used to take to perform demographic studies. Now more than ever, those who do not reinvent themselves on a regular basis will be fossilized by the pace of change. A typical BusSim engagement takes between one and two years to complete and requires a variety of both functional and technical skills. Figure 3 depicts the timeline and relative resource requirements for each phase of development for a typical application development in accordance with a preferred embodiment. The chart clearly depicts the relationship between the large number of technical resources required for both the build and test phases of development. This is because the traditional development process used to build BusSim solutions reflects more of a "one off philosophy, where development is done from scratch in a monolithic fashion, with little or no reuse from one application to the next. This lack of reuse makes this approach prohibitively expensive, as well as lengthy, for future BusSim projects.

As discussed above, in reference to claims 6 and 15, the features of "including modifying the tutorial presentation based on a user input as the tutorial presentation executes" and "including logic that modifies the tutorial presentation based on user input as the tutorial presentation executes" are in compliance with 35 U.S.C. 112, first paragraph. In the above teaching, training is tailored4 to an individual such as a user. Moreover, in accordance with MPEP §2111.01(I), "the words of a claim must be given their 'plain meaning' unless such meaning is inconsistent with the specification." The Applicant believes that claims 8 and 9 are in accordance with 35 U.S.C. 112, first paragraph, for at least the above reasons. Similarly, claims 17 and 18 contain the features of "including logic that tailors feedback based on user input as the tutorial presentation executes" and "including logic that presents a tailored simulation based on user input as the tutorial presentation executes," respectively. Applicant requests reconsideration of claims 8, 9, 17, and 18.


Examiner's response:


       Based on this and previous arguments, the Examiner withdraws the rejection.

15.    In reference to the Applicant's argument:

Claim Rejections - 35 U.S.C. §102

Claims 1-3, 5, 7, 10-12, 14, 16, and 19-21 are rejected under 35 U.S.C. 102(b) as
allegedly being anticipated by U.S. Patent No. 5,535,422 (Chiang).

Regarding claim 1, the Office Action alleges that (Page 9.):

... monitoring progress toward the goal determining at least one profile that is true, for
the current simulation task from a set of profiles, and providing feedback to a student,
based on the at least one profile, that further motivates accomplishment of the goal
(Chiang, C3:9-19; 'Monitoring' of applicant is equivalent to 'monitor' of Chiang.
'Providing feedback' of applicant is equivalent to 'provide input assistance' of Chiang.)
the at least one profile conjunctively, using a plurality of characteristics, each
characteristic identifying a subset of the simulation domain (Chiang, C9:24 through
C10:41; 'Plurality of characteristics' of applicant is equivalent to 'steps' of Chiang. 'Each
characteristic identifying a subset' of applicant is equivalent to "steps are like subtasks"
of Chiang. Therefore a single characteristic of applicant is equivalent to 'subtask' of
Chiang ....

However, Chiang fails to even suggest the feature of "monitoring progress toward the
goal, determining at least one profile that is true for the current simulation task from a
set of profiles, and providing feedback to a student, based on the at least one profile,
that further motivates accomplishment of the goal, the at least one profile conjunctively
using a plurality of characteristics, each characteristic identifying a subset of the
simulation domain." The Office Action alleges that a characteristic is equivalent to step
(subtask) in Chiang, where each lesson panel 118 includes a numbered list of steps 124
and where each step defines a subtask. (Column 10, lines 50-52.) Chiang further
discloses step panel 142 having "Next Step" and "Previous Step" pointers so that the
user can sequential navigate through the ordered sequence of steps. (Column 11, lines
15-17.) However, Chiang merely discloses a sequential execution of steps for an
associated lesson, where only one step is active at a particular time. In other words,
multiple steps cannot be executed at the same time.

Independent claim 10 includes the similar feature of "logic that monitors progress
toward the goal, determines at least one profile that is true for the current simulation
task from a set of profiles, and provides feedback to a student, based on the at least
one profile, that further motivates accomplishment of the goal, the at least one profile

conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." Also, independent claim includes the feature of "monitoring progress toward the goal, determining at least one profile from that is true for the current simulation task a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." Moreover, claims 2-3, 5, 7, 11-12, 14, 16, and 20-21 ultimately depend from claims 1, 10, and 19. Applicant requests reconsideration of claims 1-3, 5, 7, 10-12, 14, 16, and 19-21.

Examiner's response:

Applicant states that Chiang does not disclose monitoring progress towards a goal. Examiner disagrees. The goal of applicant is equivalent to the lesson of Chiang. 'Monitoring' of applicant is equivalent to monitoring of Chiang. Applicant states that Chiang does not disclose 'multiple steps cannot be executed at the same time.' This is not disclosed within the claim. In addition, there is no mention of parallel processing within the specification which would allow multiple steps being executed at the same time. Office Action stands.

## Examination Considerations

16.    The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ

541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The

Examiner has the full latitude to interpret each claim in the broadest reasonable sense.

Examiner will reference prior art using terminology familiar to one of ordinary skill in the

art. Such an approach is broad in concept and can be either explicit or implicit in

meaning.


17.    Examiner's Notes are provided to assist the applicant to better understand the

nature of the prior art, application of such prior art and, as appropriate, to further

indicate other prior art that maybe applied in other office actions. Such comments are

entirely consistent with the intent and sprit of compact prosecution. However, and

unless otherwise stated, the Examiner's Notes are not prior art but link to prior art that

one of ordinary skill in the art would find inherently appropriate.


18.    Examiner's Opinion:  Paragraphs 16 and 17 apply. The Examiner has full

latitude to interpret each claim in the broadest reasonable sense.


### *Conclusion*

19.    Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a).  Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

20.     Claims 1-21 are rejected.

*Correspondence Information*

21.     Any inquiry concerning this information or related to the subject disclosure should

be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-

5990.  The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45

p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor David Vincent can be reached at (571) 272-3080.  Any response to this

office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

Hand delivered to:

Receptionist,

Customer Service Window,

Randolph Building,

401 Dulany Street,

Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 272-3150 (for formal communications intended for entry.)

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about the PAIR system, see http://pair-direct.uspto.gov.  Should you have any questions

on access to Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll free).


/P. C./

Examiner, Art Unit 2129

Peter Coughlan

4/15/2008


/Joseph P. Hirl/

Primary Examiner, Art Unit 2129